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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
.10/664,754	09/18/2003	Yufeng Li	2002P15652US01	4113
7590 10/05/2007 Siemens Corporation Intellectual Property Department 170 Wood Avenue South Iselin, NJ 08830			EXAMINER TERMANINI, SAMIR	
			ART UNIT 2178	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/664,754

Applicant(s)

LI, YUFENG

Examiner

Samir Termanini

Art Unit

2178

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 7/19/2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>N/A</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

BACKGROUND

1. This action is responsive to the following communications: Amendment filed on 7/24/2007.

2. Claims 1–20 are pending in this case. Claims 1, 19, and 20 are in independent form. Claims 4, 6, 7, 9, 11, and 17 have been amended.

RESPONSE TO AMENDMENT

3. The examiners rejections of Claims 1–12 and 19–20 under 35 U.S.C. §102(b) 35 U.S.C. 102(b) as being anticipated by *Engdahl* (U.S. Pat. No. 6,282,455) and of Claims 13–18 under 35 U.S.C. 103(a) as being unpatentable over *Engdahl* (U.S. Pat. No. 6,282,455) in view of *Chapman et al.* (U.S. Pre–Grant Publication 2004/0021679) and *Arora et al.* (US Pat. No. 5,911,145) have been fully considered but are not persuasive.

CLAIM REJECTIONS-35 U.S.C. § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

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A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. **Claims 1-12 and 19-20** are rejected under 35 U.S.C. 102(b) as being anticipated by *Engdahl* (U.S. Pat. No. 6,282,455).

I. Citation of Prior Art

A reference to specific paragraphs, columns, pages, or figures in a cited prior art reference is not limited to preferred embodiments or any specific examples¹. It is well settled that a prior art reference, in its entirety, must be considered for all that it expressly teaches and fairly suggests to one having ordinary skill in the art². Stated differently, a prior art disclosure reading on a limitation of Applicant's claim cannot be ignored on the ground that other embodiments disclosed were instead cited. Therefore, the Examiner's citation to a specific portion of a single prior art reference is not intended to exclusively dictate, but rather, to demonstrate an exemplary disclosure commensurate with the specific limitations being addressed.

II. General Discussion of the Applied Prior Art.

Engdahl discloses a human machine interface for designing, monitoring and troubleshooting complex industrial control systems uses the paradigm of the factory floor to organize machines, control program portions and data as virtual spatially

¹ *In re Heck*, 699 F.2d 1331, 1332-33, 216 USPQ 1038, 1039 (Fed. Cir. 1983) (quoting *In re Lemelson*, 397 F.2d 1006, 1009, 158 USPQ 275, 277 (CCPA 1968)).

² *Upsher-Smith Labs. v. PamLab, LLC*, 412 F.3d 1319, 1323, 75 USPQ2d 1213, 1215 (Fed. Cir. 2005); *In re Fritch*, 972 F.2d 1260, 1264, 23 USPQ2d 1780, 1782 (Fed. Cir. 1992); *Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807, 10 USPQ2d 1843, 1846 (Fed. Cir. 1989); *In re Fracalossi*, 681 F.2d

linked objects that may be moved in three dimensions to be joined with other spatially linked objects. *Engdahl* further discloses that the user may move within the virtual factory floor among the spatially linked objects followed by spatially indifferent objects which provide tools for monitoring and interacting with the spatially linked objects. *Engdahl* further discloses Proximity of visual objects determines data sharing between objects. *Engdahl* further discloses a scene graph for producing three-dimensional representations of the factory environment and the machines, and displaying the same on the display (col. 5, lines 5-18).

III. Prior Art Anticipation of Claimed Limitations.

As to independent **claim 1**, *Engdahl* describe(s): A method for representing HMI user screens comprising the activities of: via an information device ("...a computer...", col. 2, lines 31-33): obtaining an organization and a hierarchy of a collection ("...Collecting objects...", col. 2, line 67 – col. 3, line 1) comprising a plurality of human machine interface (HMI) screen nodes ("...a graphic representation of a scene graph employed by the present invention to track the hierarchy and association of different spatially linked objects the latter represented by nodes...", col. 3, lines 43-46), each of the plurality of HMI screen nodes a visual representation of a corresponding visual display of a human machine interface ("...viewing the visual display...", col. 2, lines 40-44) adapted to interpret communications from a human operator of an automated machine controller ("...for designing, programming, control and maintenance of factory processes...", col. 4, line 67 – col. 5, line 1); automatically determining an arrangement

of the collection ("established automatically" col. 8, line 46); responsive to a detected collision between a parent node of said hierarchy of said collection and a leaf node of the parent node ("...is on top of another object...", col. 8, lines 25-26), automatically adjusting a position of said parent node ("...parent node connects to the child node's properties...", col. 8, lines 29-30); and rendering the collection according to the arrangement ("...rendering the scene...", col. 3, line 49).

As to dependent **claim 2**, which depends from claim 1, *Engdahl* further disclose(s): the method of claim 1 further comprising calculating a position of the leaf node ("...each nodes spatial coordinates are defined relative to its parent node and hence children nodes "move" with the parent node when the coordinates of the parent node are changed. Generally the coordinates include x, y and z Cartesian coordinates as well as rotative coordinates of roll, yaw, and pitch. This allows visual objects, represented by children nodes, to be placed "within" other visual objects represented by parent nodes...", col. 5, lines 32-33).

As to dependent **claim 3**, which depends from claim 1, *Engdahl* further disclose(s): the method of claim 1 further comprising calculating a position of a visible leaf ("...coordinates includ[ing] x, y and z Cartesian coordinates [of] visual objects, represented by children nodes," col. 5, lines 37-39)(emphasis added).

As to dependent **claim 4**, which depends from claim 1, *Engdahl* further disclose(s): the method of claim 1 further comprising calculating the position of the parent ("...coordinates [of] parent node...", col. 5, lines 32-33).

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As to dependent **claim 5**, which depends from claim 1, *Engdahl* further disclose(s): the method of claim 1 further comprising detecting the collision ("...if the culmination of the drag-drop operation is that the selected object 64 is on top of another object 64, then the objects 64 of the child node takes its arguments from the parent node's properties and, if necessary, the parent node connects to the child node's properties....," col. 8, lines 25-30)(emphasis added).

As to dependent **claim 6**, which depends from claim 1, *Engdahl* further disclose(s): the method of claim 1 further comprising updating the position of the parent ("...the parent node connects to the child node's properties....," col. 8, lines 29-30).

As to dependent **claim 7**, which depends from claim 1, *Engdahl* further disclose(s): the method of claim 1 further comprising updating the position of the parent ("...the parent node connects to the child node's properties...automatically....," col. 8, lines 25-30 and 46) upon detecting the collision ("if... the drag-drop operation is that the selected object 64 is on top of another object...the parent node connects to the child node's properties...automatically....," col. 8, lines 25-30 and 46).

As to dependent **claim 8**, which depends from claim 1, *Engdahl* further disclose(s): the method of claim 1 further comprising recursively calculating a position of each of the plurality of HMI screen nodes ("...respond to the operation of the computer node, again through a linking of properties....," col. 6 lines 24-27)(emphasis added).

As to dependent **claim 9**, which depends from claim 1, *Engdahl* further disclose(s): the method of claim 1 further comprising recursively calculating a position

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of each of the plurality of HMI screen nodes ("...respond to the operation of the computer node, again through a linking of properties...", col. 6 lines 24-27)(emphasis added) and updating the position of the parent upon detecting the collision ("if... the drag-drop operation is that the selected object 64 is on top of another object...the parent node connects to the child node's properties...automatically...", col. 8, lines 25-30 and 46).

As to dependent **claims 10 and 11**, which depend from claim 1, *Engdahl* further disclose(s): the method of claim 1 further comprising changing a visibility of a node and children of the node ("visibility of a particular object 64 may be changed through the node editor 78 receiving cursor commands from the devices 24 " col. 7, lines 39-47; see also, "...each node includes the property of visibility and thus its associated object may become invisible or transparent allowing this nesting of objects in other objects to be properly displayed on the visual display 22 and the display to be simplified when all components to nodes need not be displayed....," col. 6, lines 40-45)(emphasis added).

As to dependent **claim 12**, which depends from claim 1, *Engdahl* further disclose(s): the method of claim 1 wherein the arrangement is a tree arrangement ("...in which scene elements are arranged as nodes on a tree structure...", col. 5, lines 25-27)(emphasis added).

As to independent **claim 19**, this claim differs from claim 1 only in that it is directed to a product defined by the process of claim 1. Accordingly, this claim is rejected for the same reasons set forth in the treatment of claim 1, above.

As to independent **claim 20**, this claim differs from claim 1 only in that it is directed to an apparatus for carrying out the process of claim 1. *Engdahl* further disclose(s):

[A]n industrial control system [a] central control unit [i]ncluding a central processing unit [a] communications adapter [a] terminal 20 providing a visual display 22 and one or more user input devices [i]nput device 24 may be a conventional keyboard and mouse, or a spaceball...a common network [and] one or more remote units (col. 3, line 57 to col. 4, line 26).

Accordingly, this claim is rejected for the same reasons set forth in the treatment of claim 1, above.

CLAIM REJECTIONS-35 U.S.C. § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. **Claims 13-18** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Engdahl* (U.S. Pat. No. 6,282,455) in view of *Chapman et al.* (U.S. Pre-Grant Publication 2004/0021679) and *Arora et al.* (US Pat. No. 5,911,145).

As to dependent **claims 13 and 14**, which depend from claim 1, *Engdahl* taught the method for representing HMI user screens in an information device ("...a computer...", col. 2, lines 31-33; see also discussion of claim 20, above), obtaining the organization and a hierarchy of a collection ("...Collecting objects...", col. 2, line 67 – col. 3, line 1), the plurality of human machine interface (HMI) screen nodes ("...a graphic

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representation of a scene graph employed by the present invention to track the hierarchy and association of different spatially linked objects the latter represented by nodes..., col. 3, lines 43-46), each of the plurality of HMI screen nodes a visual representation of the corresponding visual display of a human machine interface ("...viewing the visual display...", col. 2, lines 40-44) adapted to interpret communications from the human operator of the automated machine controller ("...for designing, programming, control and maintenance of factory processes...", col. 4, line 67 – col. 5, line 1); automatically determining an arrangement of the collection (e.g. "established automatically" col. 8, line 46), being responsive to a detected collision between the parent node of said hierarchy of said collection and the leaf node of the parent node ("...is on top of another object...", col. 8, lines 25-26), automatically adjusting a position of said parent node ("...parent node connects to the child node's properties...", col. 8, lines 29-30); and rendering the collection according to the arrangement ("...rendering the scene...", col. 3, line 49).

Engdahl arguably fails to clearly show that the arrangement is either: (1) a vertical tree arrangement; or (2) a horizontal tree arrangement.

Arora et al. is cited for teaching an arrangement of a vertical tree, as illustrated in figure 21, below.

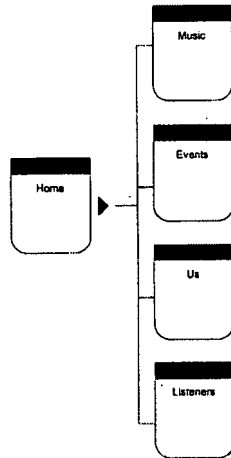


FIG. 21

United States Patent
Arora et al
Patent No. 5,911,145

Arora et al. further teaches a horizontal tree arrangement, as illustrated in figure 20, below.

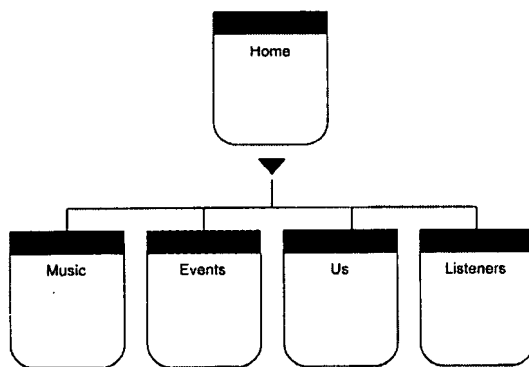


FIG. 20

United States Patent
Arora et al
Patent No. 5,911,145

Arora et al. does not teach the vertical and horizontal tree arrangements for configuring an HMI. Instead, the vertical and horizontal tree arrangements are for HTML pages of a web site.

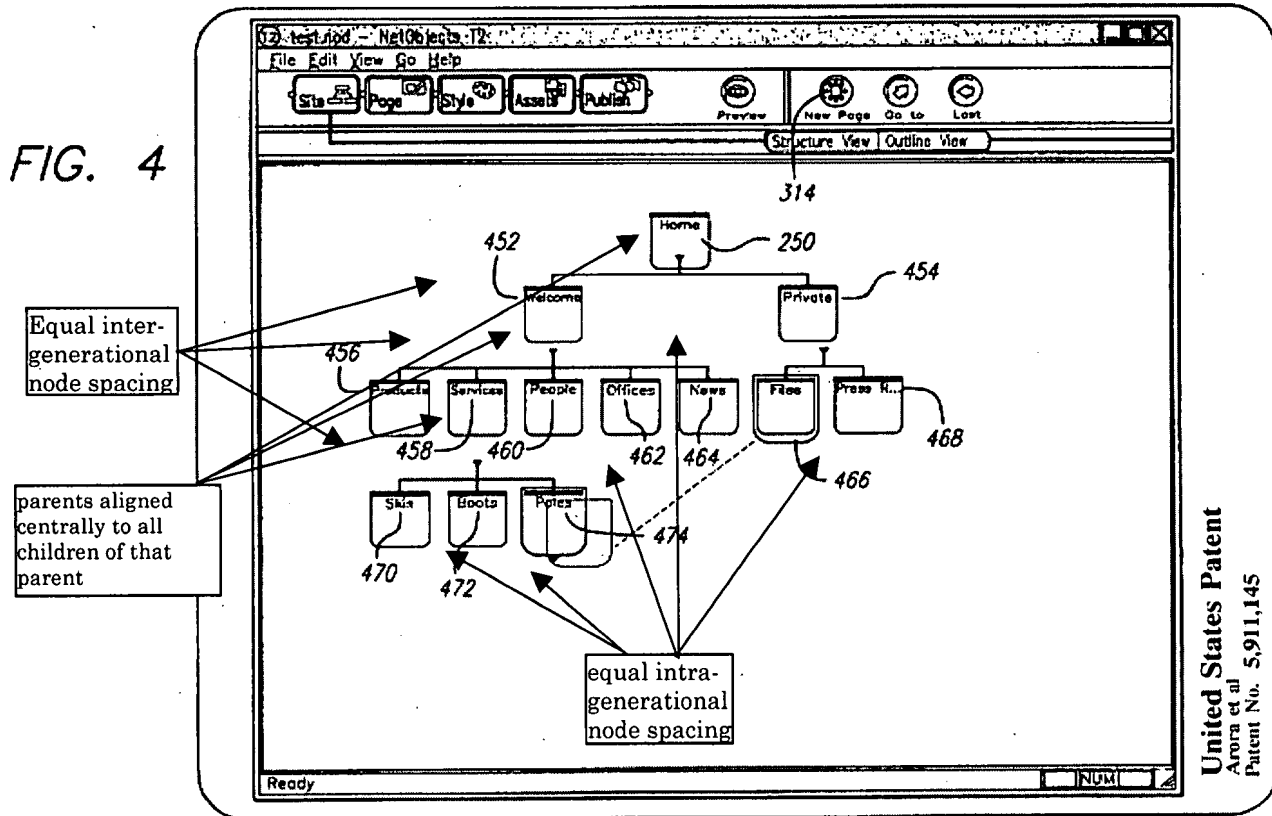
Chapman et al. teaches "a human machine interface (HMI)" (para. [0001]) including "a display page including a plurality of display page elements" (para. [0025]) where "[p]referably, the display page is HTML based" (para. [0040]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made, to have combined the vertical and horizontal tree arrangements of *Arora et al.* with the HMI editor of *Engdahl* because of the teachings in *Chapman et al.* and knowledge of persons of ordinary skill in the art. More specifically, *Chapman et al.* suggests the use of HTML display pages for "[b]etter integration between the operator HMI and other business systems. Business systems are undoubtedly moving towards greater integration with the web," para. [0226]). The level of ordinary skill coupled with the level of knowledge in the art at the time of the invention (evidenced in these three references) was such that their existed a reasonable expectation of success in the above combination (e.g. "In addition, the latest version of MSHTML includes many new features that are pivotal in making it suitable as a basis for an industrial HMI architecture...", para. [0240]). Additionally, *Engdahl*, *Chapman et al.*, and *Arora et al.* are in analogous art as they all are directed to the same field of endeavor of configuring user interfaces using markup languages.

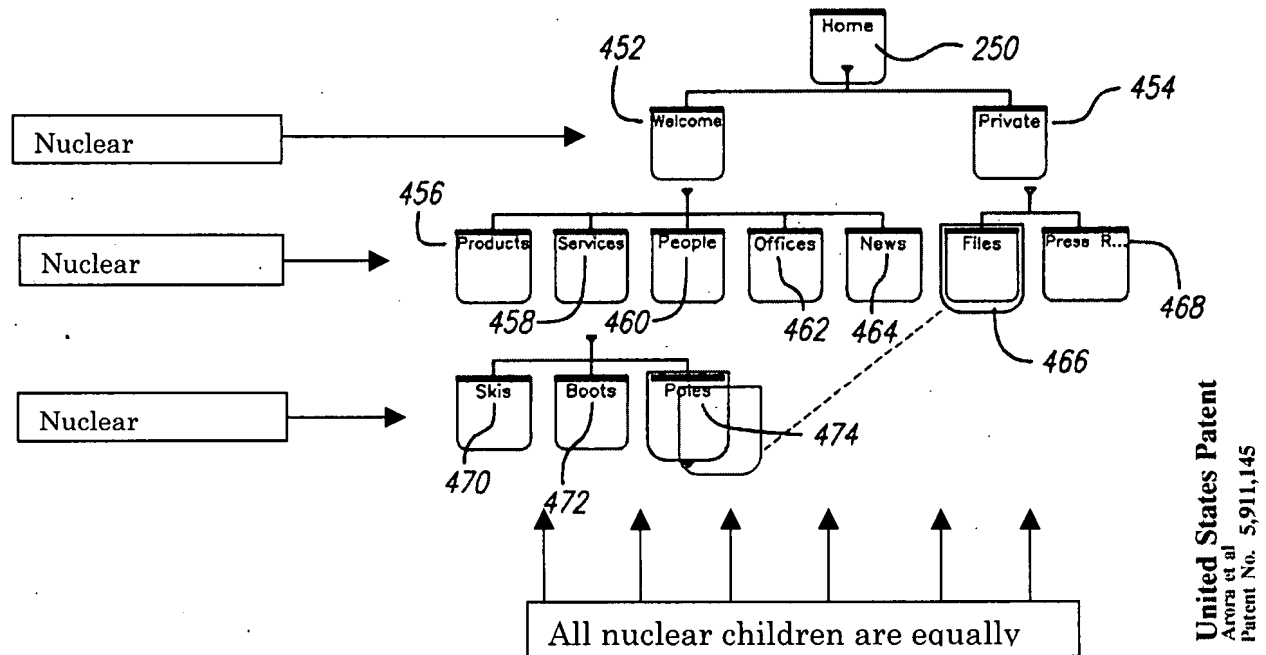
As to dependent **claims 15-17**, *Arora et al.* further disclosed the method of claim 1, wherein the arrangement is rendered with equal inter-generational node spacing,

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equal intra-generational node spacing, and each parent aligned centrally to all children of that parent-as illustrated in figure 4.



As to dependent **claim 18**, *Arora et al.* further disclosed the method of claim 1, wherein the arrangement is rendered with all nuclear children separated equally, as illustrated in figure 4.



RESPONSE TO ARGUMENTS

8. Applicant's arguments with respect to rejection of claims 1-20, see p. 7 of Applicants Amendment (dated 7/19/2007), have been considered but are not persuasive.

Applicant argues that: "automatically" adjusting a "position of said parent node" is not taught by *Engdahl*, i.e.:

Yet the present Office Action fails to provide evidence that the applied portion of *Engdahl* that allegedly states, at col. 8, lines 29-30, "node connects to the child node's properties" teaches "automatically" adjusting a "position of said parent node".

(Remarks at Page 7). Applicant then cited (Remarks at Page 8) a portion of *Engdahl* (col. 8, lines 30-51) asserted to better illustrate the difference over claims 1, 19, and 20. Applicant emphasized certain portions in bold type face.

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In response to applicant's argument, it is noted that applicant has ignored anticipatory teachings in *Engdahl* by only addressing the bolded portions of the quoted text. The examiner is reproducing Applicant's quoted text (Remarks at top of Page 8) with Applicant's untreated anticipatory portions, now bolded.

associated with another object 64. Placement of the meter tool 68 on a particular stationary object 64 provides a reading of physical quantity I/O data in quantitative form that is part of the properties of the node of the stationary object 64. An example stationary object would be a terminal block object 109 providing a visual terminal for electrical values and having a voltage property. As a **second example**, the communications port object 91 may have communications data as a property readable by the meter tool 68. The identification of **objects** that should have their arguments **connected** is by **parent child relationships** of the **scene graph** 56. All **properties of the nodes**, representing data associated with the nodes, may be grouped according to data type so that such **linkages may be established automatically**. Thus the meter tool methods indicate the type of data they may accept (e.g., voltage, temperature, logic) and **when connected to another node** as a child may search for relevant data types and **automatically connect to these devices** by reading the **properties associated with the data types**.

As pointed out above, the "properties" referenced by applied portions of *Engdahl* teach "automatically" adjusting a "position of said parent node".

Applicant argues:

The "properties" referenced by the applied portion of *Engdahl* appear to be related to providing a "reading of physical quantity I/O data in quantitative form", "communications data", or "data associated with the nodes".

In response to Applicant's argument, it is noted that Claims 1, 19, and 20 all make use of the transitional term "comprising" (which is synonymous with "including," "containing," or "characterized by,") which is inclusive or open-ended and does not

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exclude additional, un-recited elements or method steps.³ Claims 1, 19, and 20 only require the "automatically adjusting" to be "responsive to a detected collision" of the "position of said parent node". *Engdahl's* disclosure of types of "properties" being used when "automatically adjusting" in responsive to "a detected collision" is anticipatory regardless additional features being present.

Generally each node includes the property of visibility and thus its associated object may become invisible or transparent allowing this nesting of objects in other objects to be properly displayed on the visual display 22 and the display to be simplified when all components to nodes need not be displayed.

(col. 6, lines 40-45)

9. Applicant's arguments with respect to rejections under 35 U.S.C. § 103(a), see p. 7 of Applicants Amendment (dated 7/19/2007), have been considered but are not persuasive.

Applicant incorrectly asserts, under the heading "3. Next Office Action":

If an Office Action fails to set forth sufficient facts to provide a prima facie basis for the rejections, any future rejection based on the applied reference will necessarily be factually based on an entirely different portion of that reference, and thus will be legally defined as a "new grounds of rejection." Consequently, any Office Action containing such rejection can not properly be made final. See, *In re Wiechert*, 152 USPQ 247, 251-52 (CCPA 1967) (defining "new ground of rejection" and requiring that "when a rejection is factually based on an entirely different portion of an existing reference the appellant should be afforded an opportunity to make a showing of unobviousness vis-a-vis such portion of the reference")

³ See, e.g., *Mars Inc. v. H.J. Heinz Co.*, 377 F.3d 1369, 1376, 71 USPQ2d 1837, 1843 (Fed. Cir. 2004); *Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1368, 66 USPQ2d 1631, 1634 (Fed. Cir. 2003); *Genentech, Inc. v. Chiron Corp.*, 112 F.3d 495, 501, 42 USPQ2d 1608, 1613 (Fed. Cir. 1997); *Moleculon Research Corp. v. CBS, Inc.*, 793 F.2d 1261, 229 USPQ 805 (Fed. Cir. 1986); *In re Baxter*, 656 F.2d 679, 686, 210 USPQ 795, 803 (CCPA 1981); *Ex parte Davis*, 80 USPQ 448, 450 (Bd. App. 1948); *Gillette Co. v. Energizer Holdings Inc.*, 405 F.3d 1367, 1371-73, 74 USPQ2d 1586, 1589-91 (Fed. Cir. 2005).

Applicant has misinterpreted and misapplied *In re Wiechert*⁴. The court held that an appellant should be afforded an opportunity to make a showing of unobviousness when the applicant depends on showing of unexpected properties to support patentability and the factual basis of the obviousness rejection is based on an entirely different portion of an existing reference. The language applicant quoted is missing the important leading language, "Under such circumstances..."⁵ Those circumstances are only when the applicant depends on showing of unexpected properties to support patentability.⁶ Applicant has not advanced any showing of unexpected properties heretofore.

Applicant is directed to the current rule at 37 CFR 104(c)(2), which states, *inter alia*:

In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his or her command. When a reference is complex or shows or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.

All references relied on by the Examiner are not complex and are directed to applicants invention.

10. Applicant's arguments with respect to rejections under 35 U.S.C. § 103(a), see p. 7 of Applicants Amendment (dated 7/19/2007), have been considered but are not persuasive.

⁴ 152 USPQ 247,251-52 (CCPA 1967)

⁵ Id. at 251.

⁶ The court said, " Where applicant depends on showing of unexpected properties to support patentability, comparison which results in a conclusion of unexpected properties cannot practically be made for all compounds mentioned in a particular reference; thus, when rejection is factually based on an entirely different portion of existing reference, applicant should be afforded an opportunity to make a showing of unobviousness vis-a-vis such portion of reference."

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Applicant argues:

...that the present Office Action fails to evidence the scope and contents of the prior art as required under Graham. The present Office Action fails to even identify what "the pertinent art" is. Moreover, the present Office Action fails to evidence the level of ordinary skill in the pertinent art.

Applicant is directed to the "Conclusion" of each Office Action issued in this Application for prior art that has been made of Record, and moreover, to every form PTO-892 issued in this Application. Applicant will find a total of Thirty-Seven (37) cited references. Each of these references, notwithstanding being relied upon, is considered pertinent to applicant's disclosure. Applicant is required under 37 CFR §1.111(c) to consider these references fully when responding to each Office Action to which an Amendment is made. The scope and content of the prior art, inter alia, has been evidenced, not only by making it of Record, but furthermore, by presenting precise mappings from any applicable disclosure or teaching in the prior art to the applicable claim limitation(s). Applicant is reminded that, "Factors that may be considered in determining level of ordinary skill in the art include (1) the educational level of the inventor; (2) type of problems encountered in the art; (3) prior art solutions to those problems; (4) rapidity with which innovations are made; (5) sophistication of the technology; and (6) educational level of active workers in the field." *Environmental Designs, Ltd. v. Union Oil Co.*, 713 F.2d 693, 696, 218 USPQ 865, 868 (Fed. Cir. 1983), cert. denied, 464 U.S. 1043 (1984).

Below is a reproduction of a listing that the examiner provided in the previous action. These references were also on the 4/19/2007, 12/29/2006, and 7/28/2006 form PTO-892.

CONCLUSION

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Stephen S. Hong can be reached on (571) 272-4124. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

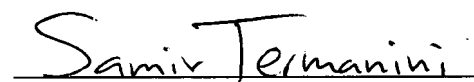
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

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USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



STEPHEN HONG
SUPERVISORY PATENT EXAMINER



Samir Termanini
Patent Examiner
Art Unit 2178